

REMARKS

This Amendment is to the Office Action mailed September 8, 2004. Claims 1 to 20 and 23 to 73 were pending previously in this application. Claims 21 and 22 were withdrawn previously due to a restriction requirement. In this Amendment, Claims 1, 12, 13, 14, 31, 36, 37, 47, 51, 57, 60, 62 and 67 have been amended. The amendments add no new subject matter. It is believed that no fee is due in connection with this Amendment, however, please charge Deposit Account No. 02-1818 for any fees owed.

In a previous response October 23, 2003, the drawings were amended slightly to show correct element numbers. The Application Papers section of the current Office Action does not state whether those drawing amendments were accepted or objected to. Applicants respectfully request notification of such decision.

In the Office Action, Claims 1 to 5, 7 to 11, 14 to 20, 23, 28, 30 to 35, 37 to 41, 43 and 44 were rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 6,210,368 to Rogers ("*Rogers*"). Claims 6, 12, 13, 24 to 27, 29, 36 and 42 to 73 were rejected under 35 U.S.C. §103(a) as being obvious in view of *Rogers*.

Applicants respectfully assert that *Rogers* does not teach the currently presented claims of the present invention. For example, Claim 1 includes a plurality of capacitor plates positioned to define a space between the plates and a fluid receptacle positioned within the space. *Rogers* beginning at column 4, line 8, states the following:

As will be apparent to those of ordinary skill, the annular convolutions 26 of bellows 22 define a first capacitor plate and member 34 defines a second capacitor plate, electrically isolated from the first capacitor plate and defining therewith a capacitive space 40. The overlapping areas of bellows 22 and member 34 and thus the size of capacitive space 40 varies with the position of bellows reservoir 22. Space 40 is maximized when bellows is in its full, expanded position and minimized when bellows 22 is in its empty, contracted position (not shown). The capacitance may be monitored using basic electrical measurement circuitry by applying a time-dependent voltage across feed through wire 38 and the pump common ground, for example, bulkhead 20. For example, the capacitance may be determined using alternating current and monitoring the impedance characteristics of the capacitive circuit comprised of the aforementioned components. [emphasis added]

Annular convolutions 26 form a first capacitor plate. Member 34 forms a second capacitor plate. Columns 3 and 4 describe outer member 34 as being ring-shaped and

surrounding annular convolutions 26 (see e.g., column 3, line 48). Space 40 resides outside of convolutions 26 and inside of outer member 34.

As noted in the Office Action, *Rogers* shows a bellows 22, which holds a drug (see e.g., column 3, line 18). If bellows 22 is taken to be the fluid receptacle of the claims, as is done in the Office Action, it is clear that bellows 22 is not located within space 40, the space between capacitor plates 26 and 34. Indeed, because the outer wall 26 of bellows 22 defines a portion of space 40, it is physically impossible for the inside of bellows 22 to be within space 40. It is therefore physically impossible for *Rogers* to anticipate or suggest various claims of the present invention, such as Claim 1.

Clearly, *Rogers* fails to anticipate the Claim 1. Moreover, the structural differences between Claim 1 and *Rogers* are more than an obvious variant. *Rogers* provides no hint as to how it could be modified to teach the structural differences between the claims and *Rogers*. Even with the benefit of hindsight it is hard to imagine how the bellows receptacle 22 could be modified to teach the claims. It is hard to imagine how receptacle 22 could be placed within the space between capacitor plates 26 and 34 given that plate 26 is defined to be on the outside of receptacle 22.

The structural differences between the claims and *Rogers* are also more than a design choice. *Rogers* discloses a number of different embodiments and design alternatives. Each of the alternatives is equally deficient with respect to the claims of the present invention. None of those alternatives provides any hint as to how it could be modified to teach the structural differences between Claim 1 and *Rogers*.

It should be appreciated that the differences and patentability arguments described above apply to each of the independent Claims 1, 12, 13, 14, 31, 36, 47, 51 and 57. Applicants therefore respectively submit that each of the non-withdrawn Claims 1 to 20 and 23 to 59 is patentable and that the patentability of each of the independent claims renders moot the anticipation and obviousness rejections of any of the claims depending from the independent claims.

Claim 37 has been amended for clarification purposes only and disclaims no subject matter over *Rogers*.

Claim 60 highlights that the capacitor plates are positioned in a non-moveable relation to one another when in operation (plates may be able to move with respect to each other for

example when loading or unloading a disposable fluid cassette). Clearly, the capacitor plates of *Rogers* move with respect to each other during operation of the device of *Rogers*. Applicants therefore respectfully submit that Claim 60 and Claim 61 depending from Claim 60 are novel, non-obvious and patentable over *Rogers*.

Claims 62 and 67 specify that the fluid is transferred through a plurality of flexible membranes, which are operable with a capacitance sensor. Clearly, *Rogers* does not disclose teach or suggest that the fluid is transferred through a plurality of flexible membranes, which are operable with a capacitance sensor. Applicants therefore respectfully submit that Claims 62 and 67 and Claims 63 to 66 and 68 to 73 depending from Claims 62 and 67, respectively, are novel, non-obvious and patentable over *Rogers*.

Applicants also respectfully submit that the present amendments and arguments are independently sufficient to distinguish the claims over *Rogers* and that prior amendments and arguments are not needed for patentability. The prior amendments and arguments do not serve to disclaim any subject matter between the present claims and *Rogers*.

For the foregoing reasons, Applicants respectfully submit that the above-identified patent application is now in condition for allowance and earnestly solicit reconsideration of same.

Respectfully submitted,

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